

INTERNATIONAL SEARCH REPORT

PCT/PTO 11 JAN 2005
Application No
PCT/CA 03/00966A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C02F1/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C02F B03C B01F A23L B01J A61L C12N C12H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 338 (C-0965), 22 July 1992 (1992-07-22) & JP 04 099473 A (MITSUI ENG & SHIPBUILD CO LTD), 31 March 1992 (1992-03-31)	1-6, 11
Y	abstract; figure 3	10
X	PATENT ABSTRACTS OF JAPAN vol. 015, no. 297 (C-0854), 29 July 1991 (1991-07-29) & JP 03 109989 A (MINORU MATSUNAMI; OTHERS: 01), 9 May 1991 (1991-05-09)	1-4, 11
Y	abstract; figure 1A	10
	--- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

31 October 2003

Date of mailing of the international search report

11/11/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Beckmann, O

INTERNATIONAL SEARCH REPORT

Application No

PCT/CA 03/00966

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 014, no. 185 (P-1036), 13 April 1990 (1990-04-13) & JP 02 032337 A (KONICA CORP), 2 February 1990 (1990-02-02)	1, 11
Y	abstract; figure 1 ----	10
X	EP 0 290 609 A (URAKAMI KAZUKO) 17 November 1988 (1988-11-17)	1-4, 11
Y	page 10, line 4 - line 14; figure 5 ----	10
X	EP 1 138 635 A (PROUDO CO LTD) 4 October 2001 (2001-10-04)	1, 2, 8, 11
Y	column 33, line 31 - column 34, line 5; figure 29 ----	10
Y	WO 98 52876 A (MORRIS TERENCE EDWARD ; TELFER DAVID BRIAN (AU)) 26 November 1998 (1998-11-26) page 2, line 11 - page 3, line 4 ----	10
X	US 5 816 058 A (HWANG GUI NAN ET AL) 6 October 1998 (1998-10-06)	1, 11
Y	cited in the application column 6, line 12 - line 17; figure 3 ----	10
X	US 6 171 490 B1 (KIM KIL HO) 9 January 2001 (2001-01-09)	1, 11
Y	cited in the application column 2, line 54 - line 57; figure 2 -----	10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 03/00966

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 04099473	A	31-03-1992	NONE	
JP 03109989	A	09-05-1991	JP 2000802 C JP 7000194 B	20-12-1995 11-01-1995
JP 02032337	A	02-02-1990	NONE	
EP 0290609	A	17-11-1988	AU 595909 B2 AU 7708087 A BR 8707528 A CA 1324108 C CN 87107681 A , B EP 0290609 A1 WO 8803513 A1 KR 9108583 Y1 KR 9108584 Y1 US 4904381 A	12-04-1990 01-06-1988 21-02-1989 09-11-1993 03-08-1988 17-11-1988 19-05-1988 26-10-1991 26-10-1991 27-02-1990
EP 1138635	A	04-10-2001	JP 2000263056 A AU 3195200 A EP 1138635 A1 WO 0056663 A1	26-09-2000 09-10-2000 04-10-2001 28-09-2000
WO 9852876	A	26-11-1998	AU 738174 B2 AU 7418698 A WO 9852876 A1 CN 1260765 T EP 1017635 A1 JP 2001525726 T NZ 501170 A US 2002195395 A1	13-09-2001 11-12-1998 26-11-1998 19-07-2000 12-07-2000 11-12-2001 31-05-2002 26-12-2002
US 5816058	A	06-10-1998	AU 3793595 A CN 1128341 A DE 19542796 A1 GB 2295105 A IT MI952365 A1 JP 2714781 B2 JP 8226754 A TR 960935 A2 ZA 9509651 A	06-06-1996 07-08-1996 23-05-1996 22-05-1996 17-05-1996 16-02-1998 03-09-1996 21-11-1996 06-06-1996
US 6171490	B1	09-01-2001	CN 1264607 A	30-08-2000